

CHRIS HARDWICKE'S ELEVATED BICYCLE TUNNELS

OVERHEAD BIKE TUNNELS PROPOSED



NATIONAL POST

'VELO-CITY'

Network would enable cyclists to go 40 km/h

BY CHARLES MANDEL
CanWest News Service

Architect Chris Hardwicke envisions a day when you will walk out your door, jump on your bicycle and commute to work at 40 kilometres an hour through dedicated tunnels suspended above Toronto's streets.

He calls his idea Velo-City, a transportation network of concrete and glass tunnels through which cyclists could race to and from their destinations.

"It's about building a separate infrastructure, just like a highway for cars. I thought, why not a highway for bikes," Mr. Hardwicke says.

Whether Velo-City is practical remains to be seen, but the idea's merit has already been recognized. The concept recently ranked third in a competition about winterizing cities held by Toronto's Design Exchange, a museum and centre for design research and education.

In Toronto, as many as 330,000 people pedal their bikes through the dark days of winter, according to Sean Wheldrake, the city's bicycle promotions coordinator.

"It was probably one of the proposals that was the most ambitious and perhaps the most unrealistic on many levels," says Paola Poletto, the Design Exchange's director of research and curator of the show in which Mr. Hardwicke's concept appeared.

Nonetheless, Ms. Poletto is not dismissing Mr. Hardwicke's proposal. "He fully believes it can be built and, structurally, it can probably be built. It's great to dream big, because that's when the ideas that are really strong make a difference."



An artist's impression of architect Chris Hardwicke's idea for elevated bike paths. "It's about building a separate infrastructure, just like highways for cars. I thought, why not a highway for bikes?"

Mr. Hardwicke says the bike tunnels would be comparable in cost to highway construction and could be built over existing streets, railways and hydro corridors. The tunnels would be one-way, with three lanes in each.

Because the tunnels offer protection from wind and with the cyclists riding in one direction, Mr. Hardwicke says the bikers would create their own tailwind, propelling them along at speeds much faster than they would average outdoors.

While Mr. Hardwicke's idea may sound offbeat, it's not the first time bike tunnels have been proposed. In the mid-1980s, Toronto engineer Joseph Adler laid out his plan for a bicycle expressway system.

Mr. Adler proposed a system of bike expressways, elevated five metres above street level and with connecting escalators to make up differences in elevation. He presented his idea at a number of international conferences.

Denver, Co.-based Bicycle Transportation Systems Inc. has also proposed an elevated, enclosed network of bike tunnels. On its Web site for the Transglide 2000 bicycle transit system, the company boasts "constant powered air movement in direction of riding removes air resistance allowing average riding speeds of 25 miles [40 km] per hour."

Christopher Kennedy, an associate professor of civil engineering and a specialist in sustainable urban infrastructure at the University of Toronto, suggests elevating the bike network creates unnecessary expense. He believes if the idea is to work, the system should be at ground level.

"I think it's creative," he says of Mr. Hardwicke's proposal. "The idea of creating a more conducive environment for cyclists by protecting them from the elements, it's probably a good thing."

Daniel Egan, manager of pedestrian and cycling infrastructure for the City of Toronto, is less convinced. He questions where the network would go — both at street level or above — and says cyclists would lose the flexibility of being able to stop wherever they wished.

Mr. Egan says the moment the system is brought down to street level, it becomes a problem to run the network through intersections, where the majority of collisions occur.

"You have people shooting out of a tube into the middle of an intersection. Nice idea, but I think if you're going to have something enclosed like that, it needs to be separate."

But Mr. Hardwicke remains determined to bring his idea forward. He talks about how the network would come with storage lockers, bike lockers and shower facilities and, because it would be pollution-free, could be routed directly into buildings.

"I've gotten only positive responses," Mr. Hardwicke says.